

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: STREETWORKS

Report Number: P628362

Luminaire Tested: **IFLD-S-SA3E-827-U-LAM**

Issue Date: 01/11/2023

Test Information

Test Method: LM-79-2019
Report Number: P628362
Test Lab: INNOVATION CENTER(G2)
Issue Date: 01/11/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-S-SA3E-827-U-LAM
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/
Lambertian distribution lens
Light Source: (48) 2700K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

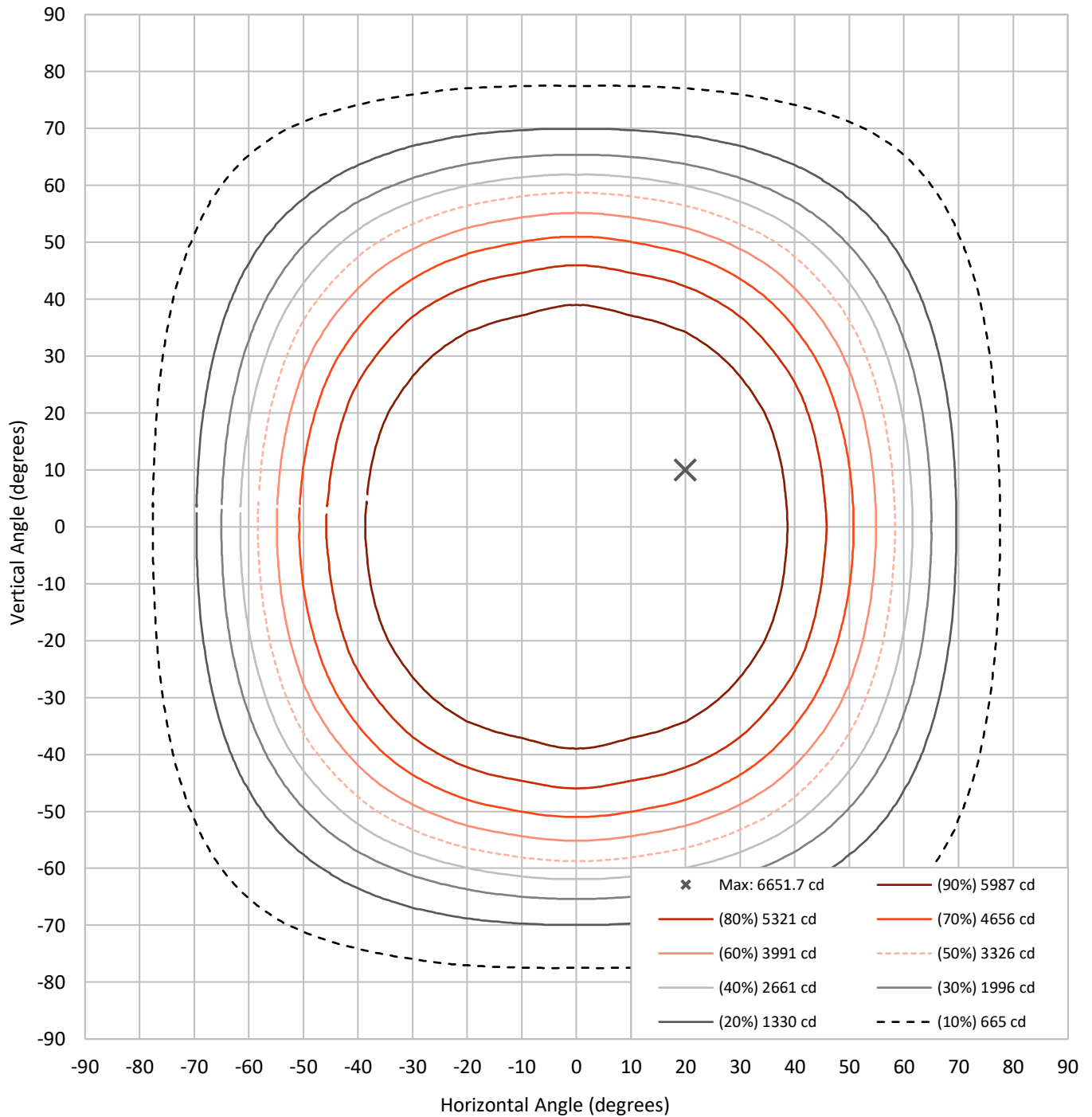
Summary

Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	20406.5 lumens	Max Intensity:	6651.7 candela
Efficiency:	N/A	Max Intensity Angle:	20°H x 10°V
Efficacy:	87.9 lumens/watt		
Luminous Opening:	Rectangular (W 1.5' x L: 0.5' x H: 0')		
Beam Angle (50%):	115.7°H x 112.9°V	Field Angle (10%):	154.7°H x 154°V
Beam Lumens:	12521.9 lumens	Field Lumens:	15011.6 lumens
Beam Efficiency:	61.4%	Field Efficiency:	73.6%
Input Watts (W):	232.1		
Input Voltage (V):	120		
Input Current (Ain):	NR		
Voltage Rise (V):	NR		
Power Factor:	NR		
Total Harmonic Distortion (THDi):	NR		
Frequency (hertz):	60		
Stabilization Time:	NR		
Operation Time:	NR		
Ambient Temperature (°C):	NR		
Test Distance:	25 FT		



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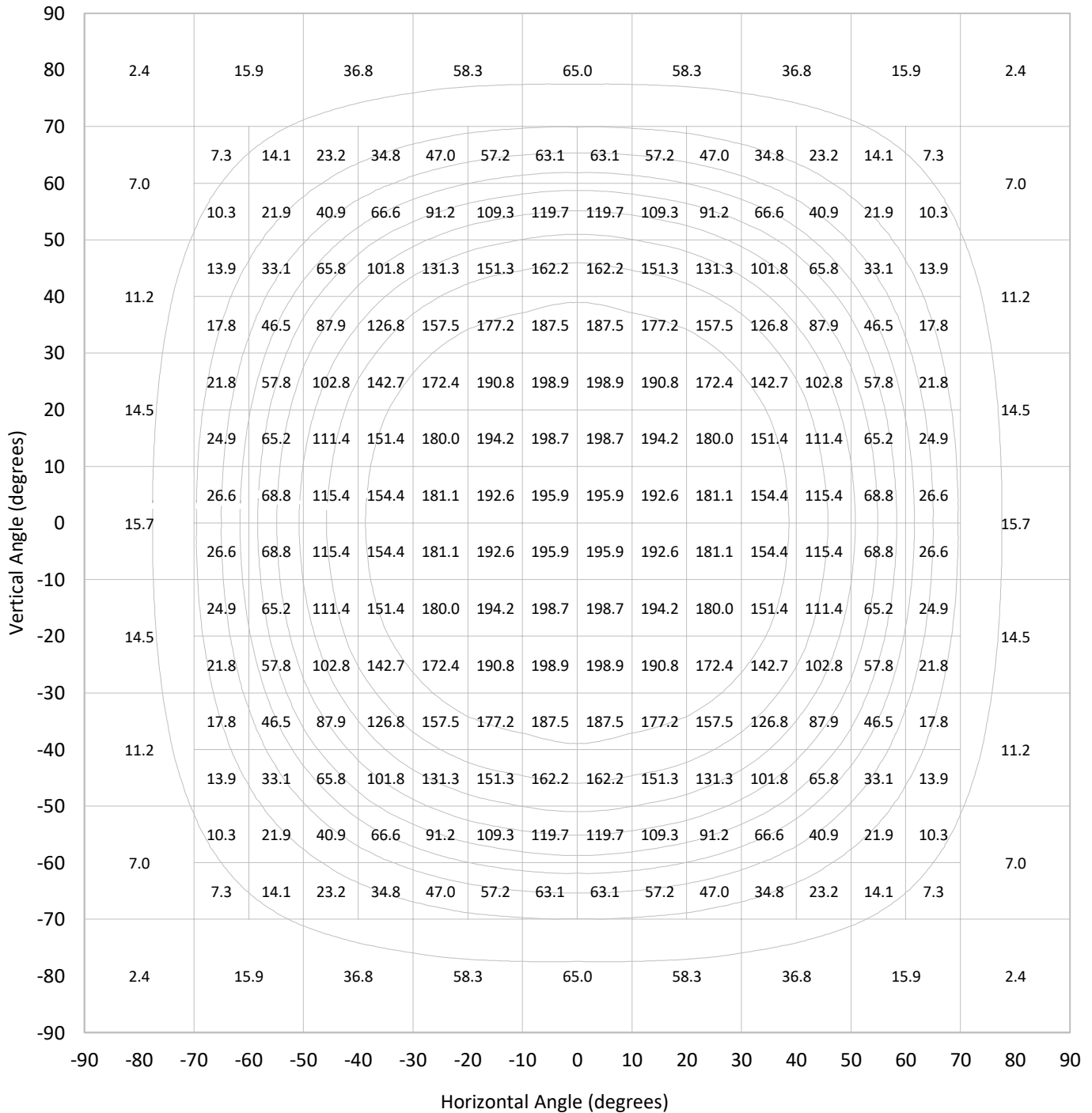
Iso-Candela Plot





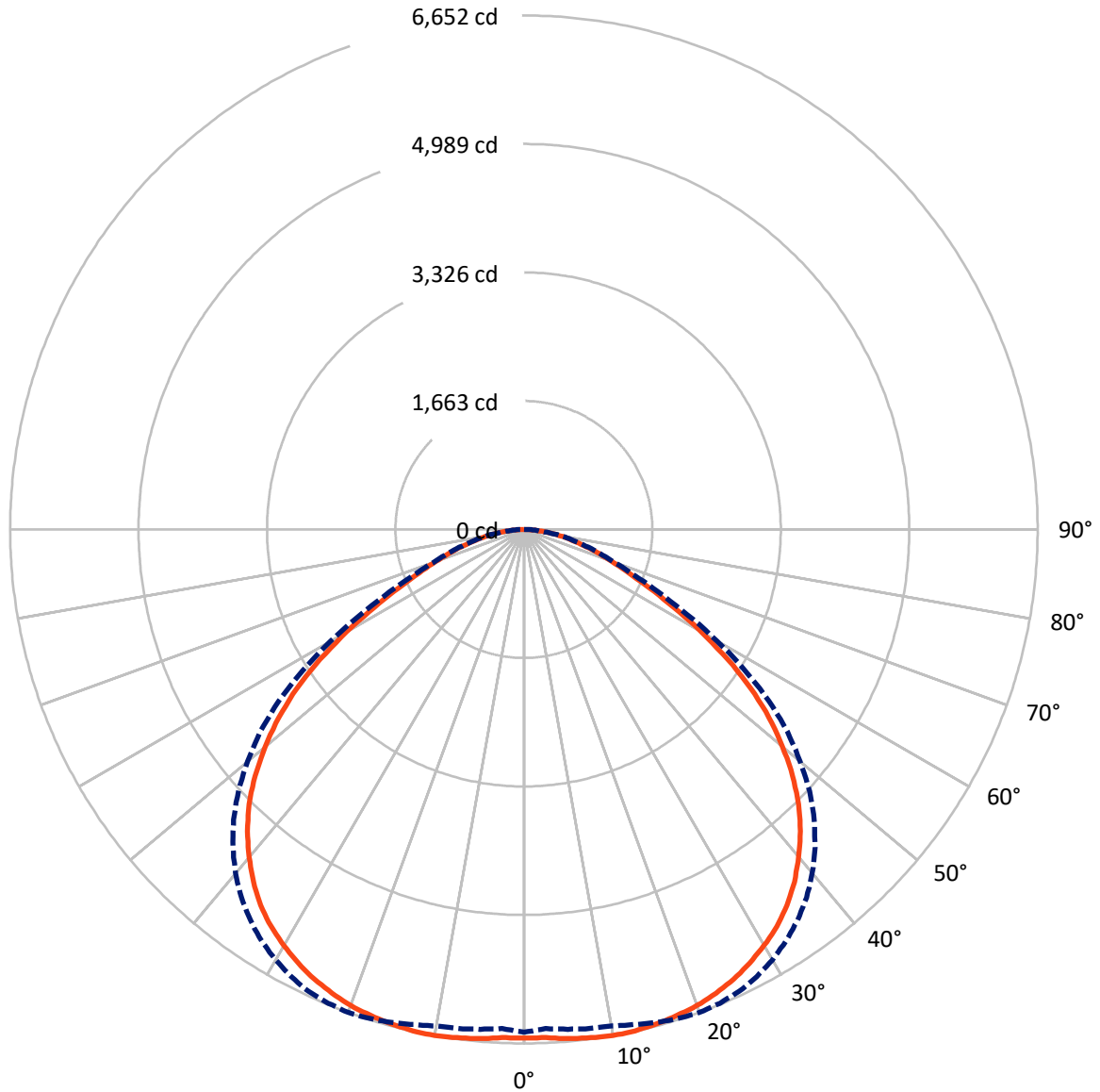
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Lumen Table



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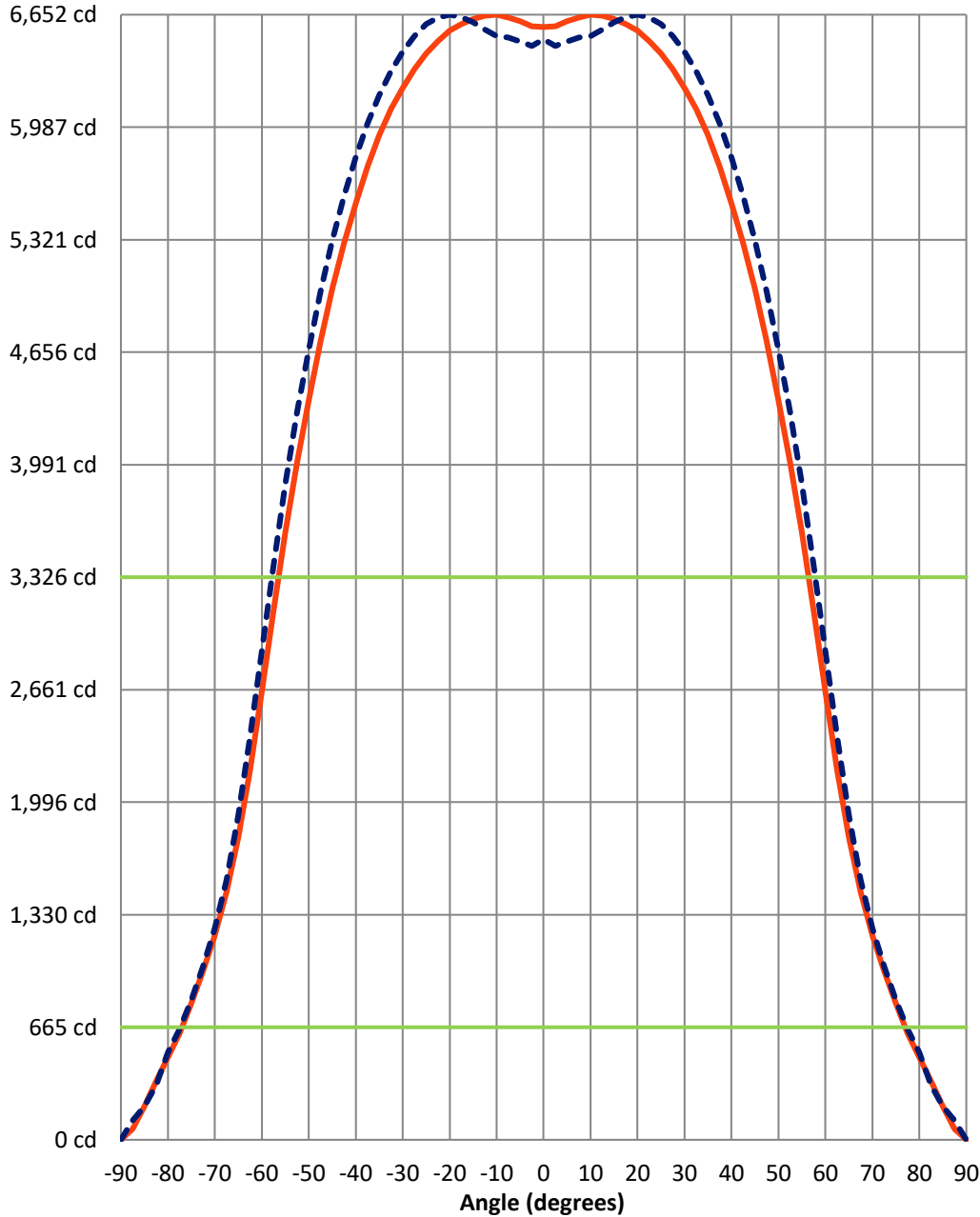
Luminous Intensity Polar Plot



— Vertical Distribution Through 20-Deg - - - Horizontal Distribution Through 10-Deg

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Luminous Intensity Plot



Beam:
 H Angle: 115.7°
 V Angle: 112.9°
 Lumens: 12521.9
 Efficiency: 61.4%

Field:
 H Angle: 154.7°
 V Angle: 154°
 Lumens: 15011.6
 Efficiency: 73.6%

Spill:
 Lumens: 5394.9
 Efficiency: 26.4%

- Vertical Distribution through 20-Deg
- - - Horizontal Distribution through 10-Deg



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FIELD
 BEAM

CANDELA DISTRIBUTION:

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	25°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	53.7	58.0	60.1	62.3	64.4	66.6	68.7	66.6	64.4	64.4	62.3
85°	143.9	148.1	150.3	165.3	180.4	188.9	199.7	197.5	197.5	195.4	193.2
82.5°	287.7	300.6	311.3	326.4	334.9	347.8	356.4	350.0	345.7	337.1	330.7
80°	511.0	515.3	517.4	519.6	508.9	506.7	502.4	496.0	487.4	476.7	465.9
77.5°	650.6	654.9	659.2	654.9	652.7	650.6	644.1	637.7	629.1	620.5	607.6
75°	861.0	861.0	861.0	854.5	850.2	843.8	833.1	822.3	807.3	790.1	770.8
72.5°	1084.3	1082.1	1080.0	1067.1	1056.4	1043.5	1028.5	1015.6	998.4	979.1	953.3
70°	1318.3	1322.6	1324.8	1307.6	1294.7	1277.5	1258.2	1234.6	1208.8	1180.9	1144.4
67.5°	1640.4	1636.1	1631.8	1608.2	1591.0	1567.4	1539.5	1505.1	1466.5	1423.5	1372.0
65°	2039.7	2046.2	2033.3	2009.7	1977.5	1938.8	1895.9	1846.5	1788.5	1724.1	1651.1
62.5°	2522.8	2533.6	2518.5	2488.5	2447.7	2396.2	2336.0	2265.2	2185.7	2095.6	2005.4
60°	3072.5	3070.3	3042.4	3001.6	2948.0	2883.5	2817.0	2739.7	2649.5	2544.3	2434.8
57.5°	3577.1	3572.8	3538.4	3497.6	3443.9	3375.2	3304.4	3222.8	3128.3	3016.7	2890.0
55°	4030.1	4025.8	3991.5	3948.5	3892.7	3824.0	3759.6	3682.3	3589.9	3471.9	3336.6
52.5°	4431.6	4433.8	4403.7	4356.5	4296.3	4229.8	4167.5	4090.2	4002.2	3884.1	3753.1
50°	4800.9	4798.8	4766.6	4723.6	4667.8	4603.4	4541.1	4463.8	4371.5	4257.7	4131.0
47.5°	5144.4	5140.1	5103.6	5056.4	4998.4	4942.6	4884.6	4815.9	4719.3	4605.5	4478.8
45°	5432.2	5423.6	5387.1	5342.0	5286.1	5236.8	5185.2	5133.7	5030.6	4925.4	4805.2
42.5°	5679.1	5676.9	5640.4	5595.3	5539.5	5496.6	5449.3	5384.9	5299.0	5202.4	5084.3
40°	5915.2	5898.1	5861.6	5818.6	5767.1	5730.6	5683.4	5618.9	5535.2	5440.7	5326.9
37.5°	6091.3	6093.5	6054.8	6007.6	5962.5	5928.1	5885.2	5825.1	5752.1	5659.7	5545.9
35°	6258.8	6248.0	6215.8	6175.0	6134.3	6095.6	6050.5	5999.0	5938.9	5853.0	5745.6
32.5°	6368.3	6383.3	6344.7	6301.7	6278.1	6248.0	6200.8	6147.1	6093.5	6007.6	5911.0
30°	6488.5	6475.6	6445.6	6409.1	6391.9	6372.6	6331.8	6280.3	6218.0	6140.7	6050.5
27.5°	6572.3	6565.8	6529.3	6495.0	6486.4	6469.2	6437.0	6391.9	6329.6	6254.5	6170.8
25°	6608.8	6613.1	6578.7	6559.4	6559.4	6548.6	6522.9	6484.2	6422.0	6353.3	6271.7
22.5°	6625.9	6621.6	6598.0	6593.7	6604.5	6595.9	6585.1	6550.8	6495.0	6439.1	6370.4
20°	6636.7	6606.6	6585.1	6602.3	6615.2	6613.1	6604.5	6583.0	6557.2	6510.0	6449.9
17.5°	6613.1	6593.7	6568.0	6593.7	6621.6	6623.8	6615.2	6602.3	6595.9	6565.8	6512.1
15°	6555.1	6540.1	6544.3	6570.1	6602.3	6613.1	6619.5	6634.5	6625.9	6602.3	6555.1
12.5°	6516.4	6497.1	6516.4	6542.2	6559.4	6565.8	6617.3	6645.3	6645.3	6623.8	6593.7
10°	6505.7	6467.1	6492.8	6516.4	6525.0	6563.7	6606.6	6636.7	6651.7	6634.5	6595.9
7.5°	6484.2	6458.5	6469.2	6479.9	6529.3	6557.2	6580.8	6613.1	6634.5	6632.4	6598.0
5°	6473.5	6441.3	6445.6	6490.7	6525.0	6544.3	6552.9	6580.8	6613.1	6619.5	6593.7
2.5°	6445.6	6430.6	6462.8	6467.1	6492.8	6507.8	6516.4	6542.2	6583.0	6598.0	6587.3
0°	6430.6	6409.1	6387.6	6404.8	6447.7	6479.9	6492.8	6531.5	6578.7	6593.7	6570.1



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CANDELA DISTRIBUTION (continued):

	27.5°	30°	32.5°	35°	37.5°	40°	42.5°	45°	47.5°	50°	52.5°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	60.1	58.0	55.8	53.7	55.8	55.8	55.8	53.7	55.8	53.7	53.7
85°	186.8	178.2	171.8	163.2	154.6	148.1	139.6	131.0	128.8	126.7	122.4
82.5°	322.1	311.3	300.6	287.7	274.8	259.8	244.8	227.6	223.3	219.0	212.6
80°	453.0	438.0	423.0	407.9	395.1	380.0	362.9	343.5	330.7	319.9	307.0
77.5°	590.5	569.0	547.5	521.7	506.7	491.7	474.5	455.2	435.9	418.7	399.4
75°	747.2	723.6	702.1	676.3	648.4	620.5	592.6	566.8	538.9	513.2	487.4
72.5°	921.1	886.8	852.4	820.2	785.8	751.5	715.0	680.6	646.3	611.9	575.4
70°	1103.6	1060.7	1017.7	974.8	929.7	884.6	841.7	798.7	755.8	710.7	669.9
67.5°	1318.3	1268.9	1213.1	1153.0	1086.4	1028.5	972.6	921.1	869.6	818.0	766.5
65°	1586.7	1518.0	1442.8	1361.3	1284.0	1206.7	1125.1	1047.8	987.7	927.5	869.6
62.5°	1917.4	1820.7	1715.5	1610.3	1515.8	1414.9	1320.5	1219.6	1125.1	1039.2	968.3
60°	2312.4	2181.4	2052.6	1917.4	1786.4	1649.0	1528.7	1404.2	1286.1	1180.9	1077.8
57.5°	2748.3	2595.8	2441.2	2275.9	2097.7	1936.7	1773.5	1610.3	1470.8	1331.2	1215.3
55°	3190.6	3029.6	2855.6	2668.8	2473.5	2267.3	2046.2	1863.7	1672.6	1509.4	1359.1
52.5°	3611.4	3443.9	3263.6	3091.8	2857.8	2621.6	2379.0	2138.5	1915.2	1706.9	1524.4
50°	3987.2	3824.0	3650.1	3450.4	3233.5	2982.3	2711.8	2441.2	2177.2	1932.4	1704.8
47.5°	4330.7	4171.8	3997.9	3798.2	3600.7	3321.6	3048.9	2750.4	2456.3	2175.0	1908.8
45°	4652.8	4491.7	4311.4	4120.3	3892.7	3643.6	3362.4	3061.8	2746.1	2430.5	2123.5
42.5°	4944.8	4783.7	4601.2	4403.7	4178.2	3931.3	3658.7	3355.9	3038.1	2694.6	2357.5
40°	5200.3	5043.5	4867.5	4661.3	4450.9	4191.1	3922.7	3635.0	3306.5	2960.8	2589.4
37.5°	5423.6	5277.6	5103.6	4899.7	4676.4	4444.5	4167.5	3879.8	3583.5	3207.8	2827.7
35°	5621.1	5485.8	5307.6	5114.4	4895.4	4650.6	4390.8	4109.5	3789.6	3437.5	3068.2
32.5°	5792.9	5655.4	5492.3	5299.0	5086.5	4856.7	4590.5	4307.1	4004.3	3645.8	3244.3
30°	5938.9	5805.7	5651.2	5468.7	5264.7	5037.1	4777.3	4491.7	4182.5	3826.1	3428.9
27.5°	6065.5	5938.9	5788.6	5618.9	5423.6	5204.6	4942.6	4654.9	4339.3	3995.7	3598.5
25°	6175.0	6052.7	5913.1	5752.1	5558.8	5344.1	5097.2	4796.6	4481.0	4135.3	3742.4
22.5°	6273.8	6155.7	6016.2	5859.4	5683.4	5468.7	5219.6	4921.1	4601.2	4259.8	3873.4
20°	6361.8	6252.3	6114.9	5953.9	5777.8	5561.0	5314.1	5030.6	4708.6	4373.6	3991.5
17.5°	6432.7	6336.1	6198.7	6029.0	5853.0	5642.6	5402.1	5142.3	4800.9	4470.3	4090.2
15°	6482.1	6387.6	6263.1	6091.3	5919.5	5711.3	5470.8	5202.4	4884.6	4547.5	4171.8
12.5°	6516.4	6415.5	6299.6	6140.7	5968.9	5762.8	5528.8	5264.7	4955.5	4616.3	4242.7
10°	6525.0	6432.7	6316.8	6175.0	6007.6	5807.9	5578.2	5316.2	5013.5	4669.9	4300.6
7.5°	6529.3	6441.3	6336.1	6200.8	6035.5	5842.2	5614.7	5357.0	5056.4	4715.0	4343.6
5°	6527.2	6443.4	6349.0	6218.0	6052.7	5861.6	5638.3	5384.9	5086.5	4745.1	4375.8
2.5°	6520.7	6445.6	6357.5	6230.9	6072.0	5883.0	5661.9	5417.1	5118.7	4770.8	4401.5
0°	6537.9	6473.5	6361.8	6226.6	6076.3	5883.0	5659.7	5421.4	5123.0	4768.7	4399.4



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CANDELA DISTRIBUTION (continued):

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	53.7	51.5	51.5	49.4	47.2	45.1	40.8	38.6	34.4	27.9	21.5
85°	115.9	109.5	103.1	98.8	94.5	90.2	83.7	77.3	68.7	55.8	42.9
82.5°	204.0	191.1	178.2	163.2	150.3	137.4	126.7	115.9	103.1	83.7	64.4
80°	292.0	272.7	253.4	231.9	212.6	191.1	171.8	154.6	137.4	111.6	85.9
77.5°	380.0	354.3	326.4	300.6	272.7	244.8	216.9	193.2	167.5	137.4	107.4
75°	461.6	431.6	405.8	369.3	334.9	298.4	261.9	229.7	197.5	161.0	128.8
72.5°	543.2	504.6	468.1	433.7	395.1	350.0	309.2	268.4	227.6	184.7	146.0
70°	624.8	577.6	532.5	491.7	448.7	403.7	354.3	307.0	257.7	206.1	161.0
67.5°	708.5	654.9	603.3	551.8	502.4	450.9	399.4	345.7	287.7	227.6	178.2
65°	800.9	734.3	672.0	614.1	556.1	500.3	442.3	384.3	319.9	251.2	193.2
62.5°	893.2	820.2	747.2	674.2	609.8	547.5	485.2	420.8	350.0	277.0	208.3
60°	992.0	908.2	824.5	742.9	663.5	594.7	526.0	457.3	382.2	300.6	223.3
57.5°	1101.5	1000.5	906.1	813.7	723.6	642.0	566.8	493.8	410.1	324.2	240.5
55°	1226.0	1101.5	989.8	886.8	788.0	689.2	607.6	532.5	442.3	347.8	259.8
52.5°	1357.0	1213.1	1077.8	961.9	856.7	745.0	646.3	562.5	474.5	371.4	277.0
50°	1509.4	1326.9	1176.6	1034.9	916.8	800.9	687.1	596.9	506.7	399.4	294.2
47.5°	1666.1	1464.3	1275.4	1120.8	981.2	854.5	734.3	627.0	536.8	425.1	311.3
45°	1848.6	1595.3	1387.0	1204.5	1043.5	910.4	781.5	659.2	562.5	450.9	328.5
42.5°	2024.7	1749.9	1503.0	1296.8	1114.3	964.0	824.5	693.5	588.3	476.7	343.5
40°	2233.0	1904.5	1614.6	1384.9	1185.2	1015.6	867.4	730.0	611.9	500.3	358.6
37.5°	2432.7	2061.2	1749.9	1481.5	1253.9	1067.1	910.4	764.4	633.4	523.9	377.9
35°	2630.2	2235.1	1878.7	1571.7	1324.8	1125.1	953.3	796.6	654.9	543.2	395.1
32.5°	2819.1	2398.3	2009.7	1672.6	1402.1	1178.8	992.0	826.6	676.3	560.4	412.2
30°	2995.2	2552.9	2138.5	1775.6	1472.9	1228.1	1028.5	856.7	702.1	575.4	429.4
27.5°	3156.2	2703.2	2267.3	1872.3	1539.5	1273.2	1067.1	884.6	723.6	590.5	444.4
25°	3302.2	2838.5	2385.4	1960.3	1599.6	1322.6	1103.6	912.5	742.9	603.3	457.3
22.5°	3439.6	2963.0	2492.8	2048.3	1672.6	1372.0	1138.0	938.3	762.2	616.2	470.2
20°	3559.9	3076.8	2595.8	2136.4	1737.0	1417.1	1168.0	961.9	779.4	624.8	483.1
17.5°	3656.5	3177.7	2688.2	2213.7	1792.8	1455.7	1193.8	983.4	794.4	635.5	491.7
15°	3742.4	3263.6	2765.5	2280.2	1842.2	1487.9	1217.4	1000.5	807.3	642.0	502.4
12.5°	3815.4	3336.6	2832.0	2338.2	1885.1	1515.8	1236.7	1013.4	818.0	648.4	508.9
10°	3875.5	3394.6	2887.8	2383.3	1919.5	1537.3	1251.8	1026.3	826.6	654.9	515.3
7.5°	3920.6	3437.5	2928.6	2421.9	1947.4	1552.3	1264.6	1034.9	835.2	659.2	526.0
5°	3954.9	3474.0	2960.8	2447.7	1968.9	1573.8	1279.7	1045.6	843.8	663.5	526.0
2.5°	3980.7	3504.1	2986.6	2469.2	1986.1	1569.5	1279.7	1043.5	843.8	663.5	523.9
0°	3976.4	3506.2	2984.5	2469.2	1986.1	1565.2	1279.7	1041.3	843.8	663.5	523.9



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	15.0	10.7	4.3	0.0
85°	32.2	21.5	10.7	0.0
82.5°	47.2	30.1	15.0	0.0
80°	62.3	40.8	19.3	0.0
77.5°	79.4	51.5	25.8	0.0
75°	94.5	60.1	30.1	0.0
72.5°	109.5	70.9	34.4	0.0
70°	122.4	79.4	38.6	0.0
67.5°	135.3	90.2	45.1	0.0
65°	146.0	98.8	49.4	0.0
62.5°	154.6	109.5	53.7	0.0
60°	165.3	118.1	58.0	0.0
57.5°	173.9	124.5	62.3	0.0
55°	182.5	128.8	66.6	0.0
52.5°	191.1	135.3	70.9	0.0
50°	199.7	141.7	75.1	0.0
47.5°	208.3	146.0	77.3	0.0
45°	221.2	152.4	81.6	0.0
42.5°	231.9	156.7	85.9	0.0
40°	242.6	161.0	88.0	0.0
37.5°	253.4	165.3	92.3	0.0
35°	264.1	169.6	94.5	0.0
32.5°	272.7	173.9	96.6	0.0
30°	281.3	178.2	98.8	0.0
27.5°	289.9	180.4	100.9	0.0
25°	296.3	184.7	103.1	0.0
22.5°	302.7	186.8	105.2	0.0
20°	307.0	188.9	107.4	0.0
17.5°	313.5	191.1	109.5	0.0
15°	315.6	193.2	113.8	0.0
12.5°	319.9	195.4	113.8	0.0
10°	322.1	197.5	113.8	0.0
7.5°	326.4	197.5	113.8	0.0
5°	324.2	197.5	113.8	0.0
2.5°	324.2	197.5	113.8	0.0
0°	322.1	197.5	113.8	0.0

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